



Improving HIV Screening Rates in Adolescents in the Primary Care Setting



Maureen Crispin, M.D., Deborah Winders Davis, PhD, Kendall Purcell, M.D.
Departments of Pediatrics, University of Louisville School of Medicine

Background

In 2010, adolescents and young adults aged 13-24 years made up 17% of the US population but accounted for 26% of estimated new HIV infections. Among adolescents and young adults living with HIV, 44% were undiagnosed, which was the highest percentage of any age group. Primary care pediatricians play a key role in education, prevention and screening adolescents for HIV; however, a 2011 study emphasized the discrepancy between current AAP and CDC Screening recommendations and clinical practice.

STI and HIV Screening Recommendations in Adolescents:

- * CDC recommends all adults and adolescents be tested for HIV at least once between 13-64 years of age and annually for high risk adolescents who are concurrently being tested for other STIs.
- * AAP Policy Statement: all adolescents should be offered HIV screening via opt out testing at least once by age 16-18 when the prevalence of HIV is >0.1% in the community. In areas of lower prevalence, routine HIV screening via targeted testing is encouraged for all sexually active adolescents and those with other risk factors for HIV.
- * CDC and AAP recommend annual screening of sexually active females <= to 25 years of age for gonorrhea and chlamydia and screening of any symptomatic or at-risk adolescents.

Objective

The aim of this project was to improve HIV screening rates in adolescents in the ULP Pediatrics Downtown Clinic by 30% in 6 months.

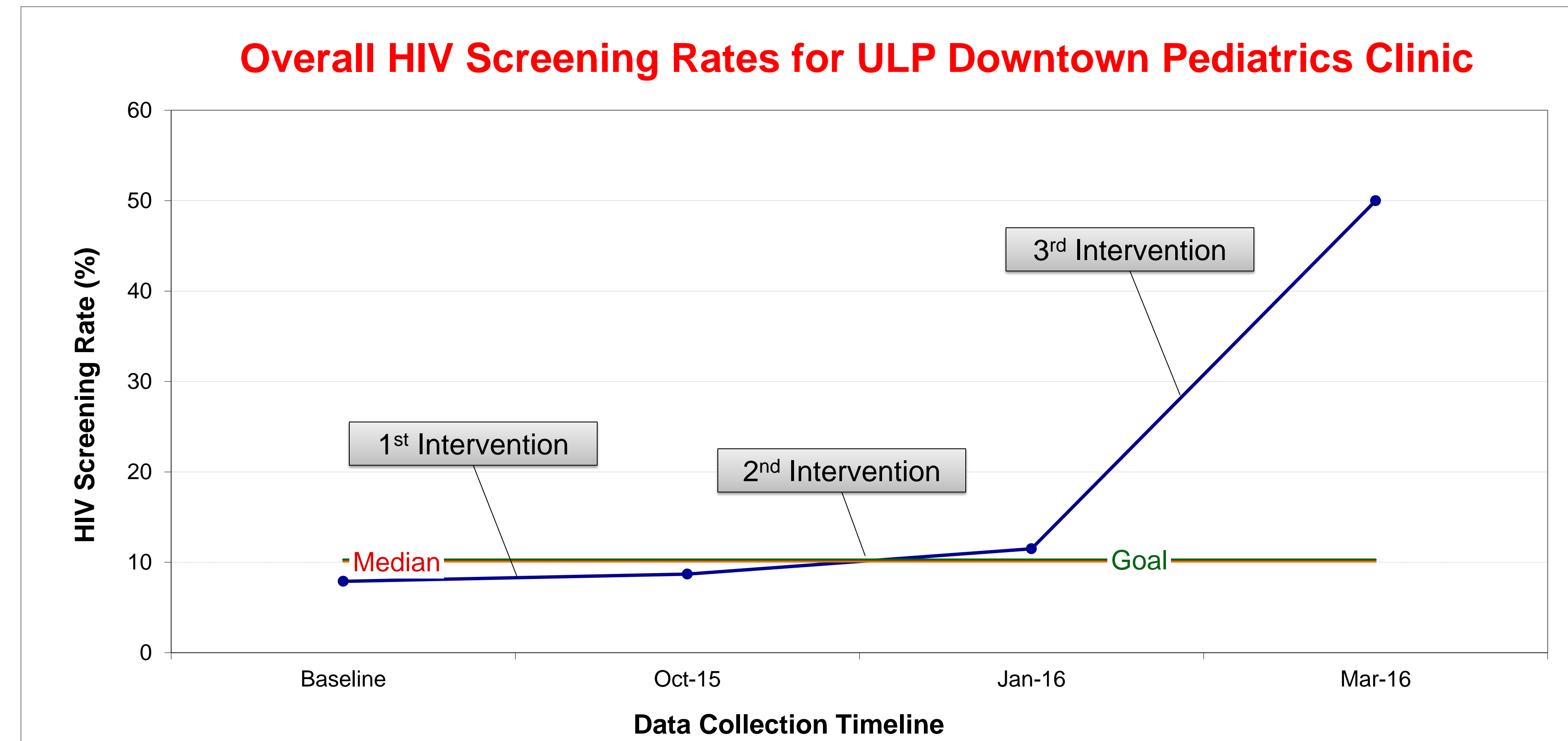
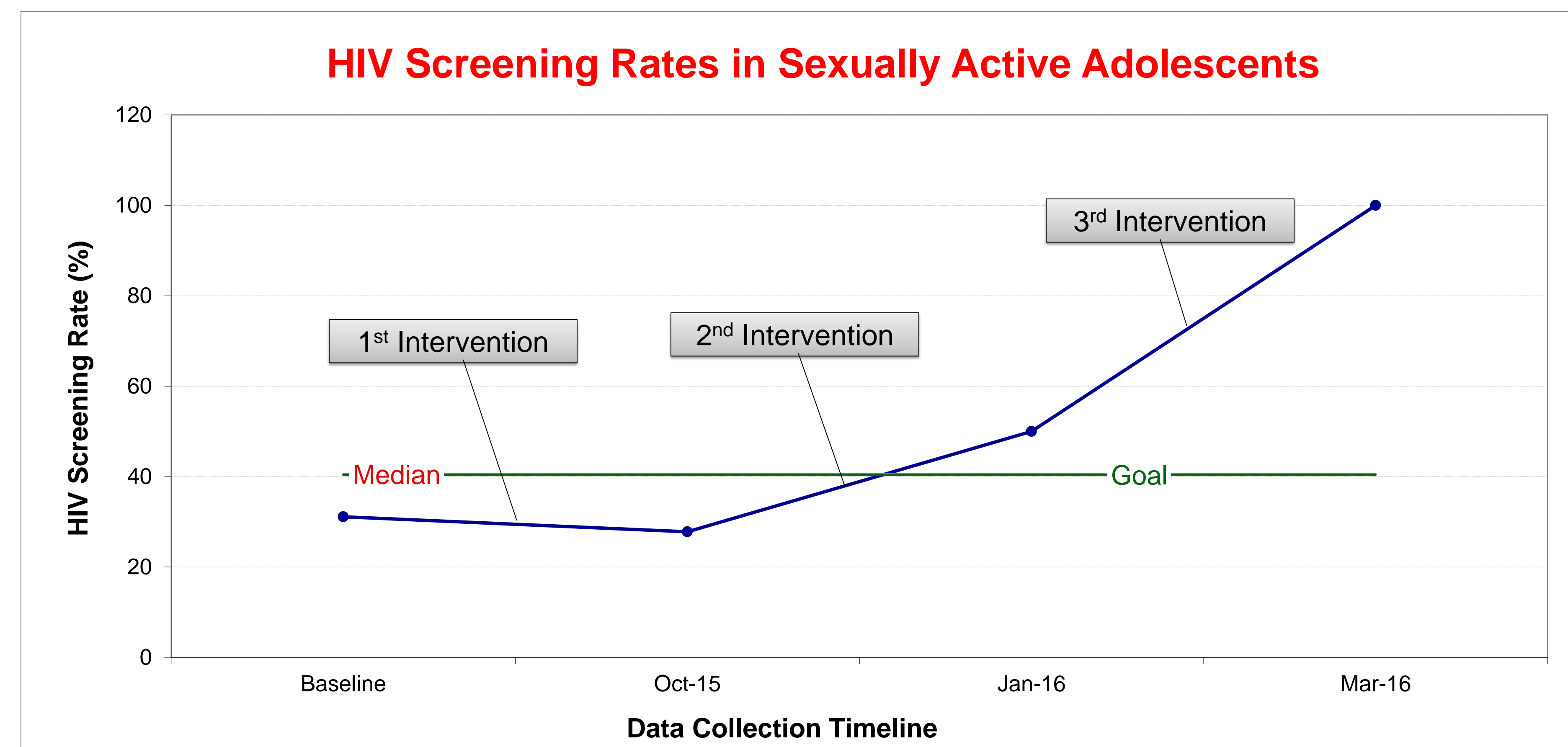
Methods

Baseline HIV screening rates were determined with a chart review of 13-19 year adolescent well child visits performed at the ULP Pediatrics Downtown Clinic. Three interventions were then performed within a 6 month time period, with a follow up chart review conducted after each intervention. Several co-variables were also assessed with each chart review including sexual history documentation, sexual activity, age, sex, race, provider type (attending, resident, nurse practitioner) and STI screening for gonorrhea, chlamydia and syphilis at the same visit.

Interventions:

- * **First:** ULP Downtown clinicians were educated on current AAP and CDC STI and HIV screening recommendations.
- * **Second:** a new section was added to the EMR note template for adolescent well visits to remind clinicians to screen for HIV, gonorrhea and chlamydia.
- * **Third:** a reminder email sent to ULP Downtown resident physicians containing the screening recommendations and the updated EMR note template.

Results



HIV Screening Rates

	Baseline Data n=190 (%)	After 1 st Intervention n=69 (%)	After 2 nd Intervention n=52 (%)	After 3 rd Intervention n=6 (%)
Documented as sexually active	23.7	26.1	23.1	50
HIV screening	7.9	8.7	11.5	50
HIV screening in those documented as sexually active	31.1	27.8	50	100

Co-variables

		Baseline Data n=190 (%)	After 1 st Intervention n=69 (%)	After 2 nd Intervention n=52 (%)	After 3 rd Intervention n=6 (%)
Sex	M	45.8	47.8	44.2	50
	F	54.2	52.2	55.8	50
Race	Caucasian	9.5	10.1	13.5	0
	African American	80	82.6	67.3	100
	Hispanic	4.2	5.8	7.7	0
	Other Race	6.4	1.4	11.6	0
Documented Sexual History		91.1	85.5	84.6	83.3
Mean Age (yr)		14.7	14.8	14.6	15.8

Conclusions

- * Appropriate HIV screening in the high risk adolescents, such as those who are sexually active, is important in identification, treatment and prevention of the disease.
- * The baseline data illustrates poor screening rates both overall and in sexually active adolescents in the primary care setting.
- * HIV screening rates improved with each intervention suggesting clinician education and built in EMR prompts are helpful in improving HIV screening in adolescents in the primary care setting.
- * Based on these results, clinicians would likely benefit from a standardized education curriculum that highlights HIV screening guidelines and provides tools available in the primary care setting, such as EMR templates and prompts, to help facilitate appropriate screening.

Acknowledgments

We thank Natalie Pasquenza for her help with the IRB approval and Elizabeth Smigielski for her help with the background literature review.

References

- Centers for Disease Control and Prevention. Estimated HIV incidence in the United States, 2007-2010. HIV Surveillance Supplemental Report 2012.
- Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives using HIV surveillance data-United States and 6 dependent areas-2013. HIV Surveillance Supplemental Report 2015.
- Centers for Disease Control and Prevention. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health care settings. MMWR Recomm Rep 2006; 55 (no. RR-14).
- Adolescents and HIV Infection: The Pediatrician's Role in Promoting Routine Testing. Committee on Pediatric AIDS. Pediatrics Nov 2011, 128 (5) 1023-1029.